



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,704	12/27/2001	Thomas E. Murphy	BS01-286	9260
38516 7590 07/13/2007 SCOTT P. ZIMMERMAN, PLLC PO BOX 3822 CARY, NC 27519			EXAMINER VAN HANDEL, MICHAEL P	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 07/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/026,704

Applicant(s)

MURPHY ET AL.

Examiner

Michael Van Handel

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Miscellaneous

1. The examiner apologizes for the inconsistency in the Office Action mailed 1/25/2007. The applicant was correct in assuming that claims 19-31 were rejected over the combination of DeWeese et al., Mimura et al., and August et al. The examiner has corrected the inconsistency below.

Response to Amendment

1. This action is responsive to an Amendment filed 4/23/2007. Claims **19-31** are pending. Claims **1-18** are canceled.

Response to Arguments

1. Applicant's arguments regarding claims **19** and **30**, filed 4/23/2007, have been fully considered, but they are not persuasive.

Regarding claims **19** and **30**, the applicant argues that DeWeese et al. fails to disclose "a second output adapted to be received by a set top box." The examiner respectfully disagrees. DeWeese et al. discloses a television chat system 10 as shown in Fig. 1A. Communication paths 24 have sufficient bandwidth to allow television distribution facility 16 to distribute scheduled television programming, pay programming, real-time communications, chat requests and other video and audio information to user television equipment 20 in addition to non-video program guide information and communications. The real-time communications supported by

Art Unit: 2623

communication paths 24 may be text-based or, if more bandwidth is available, may be audio or video communications (p. 3, paragraph 55). DeWeese et al. discloses that each set-top box 26 is connected to a videocassette recorder (VCR) 28, which is further connected to a television 30 (p. 4, paragraphs 64, 65 & Fig. 1A). The examiner interprets the connection from the set-top box to the VCR and television to be a first output adapted to be received by the television, as claimed. DeWeese et al. further discloses that the communications paths 24 have two-way digital channels for supporting real-time communications (p. 3, paragraphs 55-56). Real-time communications and chat requests are distributed along communication paths from one user television equipment device 20 associated with a given television distribution facility 16 to another user television equipment device 20 associated with that facility using a chat server located at the facility (p. 5, paragraph 71 & Fig. 2A). The examiner interprets the communication path sending chat messages to be a second output adapted to be received by a second set top box, as claimed. Thus, the examiner maintains that DeWeese et al. meets the limitation of “a second output adapted to be received by a second set top box,” as currently claimed.

Further regarding claims 19 and 30, the applicant argues that DeWeese et al. fails to disclose “a second input adapted to receive audible message information.” The examiner respectfully disagrees. As mentioned above, DeWeese et al. discloses a television chat system 10 as shown in Fig. 1A. Communication paths 24 have sufficient bandwidth to allow television distribution facility 16 to distribute scheduled television programming, pay programming, real-time communications, chat requests and other video and audio information to user television equipment 20 in addition to non-video program guide information and communications. The real-time communications supported by communication paths 24 may be text-based or, if more

Art Unit: 2623

bandwidth is available, may be audio or video communications (p. 3, paragraph 55). Multiple television and audio channels are provided to set-top boxes 26 via communications paths 24 (p. 3, paragraph 56). The examiner interprets the communication path receiving television audio channels to be a first input receiving an audio signal, as currently claimed. DeWeese et al. further discloses that real-time audio communications can be sent by a user speaking into microphone 232. The user's voice is converted into a signal that is received by set-top box 228. Set-top box 228 transmits the user's voice signal to chat server 222 (p. 9, paragraph 105 & Fig. 10). The examiner interprets the input from microphone 232 to set-top box 228 to be a second input adapted to receive audible message information. Thus, the examiner maintains that DeWeese et al. meets the limitation of "a second input adapted to receive audible message information," as currently claimed.

Still further regarding claims 19 and 30, the applicant argues that DeWeese et al. teaches away and cannot support the examiner's *prima facie* cases and that there is no reasonable expectation of success. The applicant specifically argues that any combination involving DeWeese et al. requires an impermissible change to DeWeese et al.'s principle of operation. The applicant states that "... DeWeese's principle of operation is to cancel a program's audio from sent chat messages. That is, when chat messages are recorded by a microphone, the TV program's audio is subtracted from inputs to the microphone. The only way for DeWeese, Mimura, and August to reduce 'a volume of the audio signal ... below a volume of the received audible message information being played,' as independent claims 19 and 30 recite, is to change, or even eliminate the principle operating aspects of DeWeese's 'television chat system.'"

The examiner respectfully disagrees. DeWeese et al. is directed to allowing users at user television equipment 20 to engage in television program-related real-time audio chat communications while watching television (p. 5, paragraph 70 & p. 9, paragraph 101).

Paragraph 101 describes a television talk show with a live question and answer sessions with various users who are watching the talk show (p. 9, paragraph 101). Fig. 10 illustrates an example of an audio chat system in which real-time audio communications may be transmitted between different user television equipment devices 226 via television distribution facility 220. Real-time audio communications are transmitted over communications paths 224 and processed by chat server 222 or suitable audio conferencing equipment. Chat server 222 is located separately from television distribution facility 220. The audio chat system may be configured to cancel out audio from the current TV program in the *send* user's audio chat messages, so that the recipient user does not hear the TV program audio along with the sender's audio messages (italicized for emphasis). This procedure may be performed at the microphone end using signal subtraction whereby the microphone input is compared with the TV program audio and only the user's input is passed to the chat server (p. 9, paragraph 102). That is, the audio of the TV program the sender is watching is canceled out of the sender's audio message.

A good analogy useful in understanding the above-described procedure is a radio call-in talk show. In a radio talk show, a talk show host will often ask the caller to reduce the volume on their radio before speaking on the phone, so that the background sound from the caller's radio is not sent as part of the caller's telephone call, and then further sent to all radio show listeners. Similarly, DeWeese et al. describes a procedure for the removal of the sender's background television audio from the sender's audio message, so that the receiving user doesn't hear the

Art Unit: 2623

sender's background television audio. This does not mean that the receiving user is not watching and listening to a television program as the audio message is played. In fact, the chat server 222 and television distribution facility 220 are located separately. As such, removing the sender's background television audio before sending the user's input to the chat server would have no effect on the receiving user's television audio. Furthermore, even if assuming, for argument's sake, that all television audio were removed, DeWeese et al. states that the audio chat system *may* be configured to cancel out audio ... Thus, the examiner finds that this operation is not principle to the operation of DeWeese et al. In view of the above, the examiner maintains that DeWeese et al. does not "teach away" from the claimed invention and that the combination of DeWeese et al. with Mimura et al. and August et al. is proper.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 19-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeWeese et al. in view of Mimura et al. and further in view of August et al.

Referring to claims 19, 22, 29, and 30, DeWeese et al. discloses a set top box integrated with, or communicating with, a television, the set top box comprising:

- a first input receiving an audio signal (p. 3, paragraph 56);
- a first output adapted to be received by the television (p. 4, paragraph 65 & Fig. 1A);

Art Unit: 2623

- a second output adapted to be received by a second set top box (p. 3, paragraph 57);
- a second input adapted to receive audible message information (p. 9, paragraphs 101, 105; & Fig. 10); and
- a back channel communications path that is different from the first input (the examiner notes that the chat server 88 is connected to television distribution facility 16 via communications network 86, so the back channel path is different from the first input)(p. 5, paragraph 71 & Fig. 2A).

DeWeese et al. further discloses transmitting video chat images with audio as real-time communications by the chat system (p. 10, paragraph 107, 111 & Fig. 11). DeWeese et al. still further discloses that the video chat images and audio can be shown at the same time as a television program (p. 11, paragraphs 119, 120; & Figs. 16, 17). DeWeese et al. does not disclose that the audio signal is processed for an audio channel and the audible message information is processed for another audio channel and a volume of the audio signal is reduced below a volume of the received audible message information being played. Mimura et al. discloses a television audio/visual (A/V) conferencing system with a database 12. The AV database stores combinations of video signal characteristics and corresponding audio signal processing parameters, such as a volume of sound to be reproduced and a balance between sounds reproduced by loudspeakers (col. 9, l. 10-35). The processing parameters are read from the database and supplied to an audio signal processor to control the sound field to produce an acoustic space suitable for an image, by changing the sound volume and right and left balance to localize sounds based on the locality of displayed images (col. 6, l. 13-23; col. 20, l. 22-62; & Figs. 32A-33). It would have been obvious to one of ordinary skill in the art at the time that the

Art Unit: 2623

invention was made to modify the video and audio chat system of DeWeese et al. to include changing the sound volume and right and left balance of received audio messages to be output from different speakers, such as that taught by Mimura et al. in order to provide a real-time TV conferencing system with improved reality (Mimura et al. col. 3, l. 36-45). The combination of DeWeese et al. and Mimura et al. does not teach reducing a volume of the audio signal below a volume of the received audible message information. August et al. discloses a set-top box 30 for receiving A/V and telephone signals. When a television viewer receives a telephone call over the set-top box, the audio signal emanating from the video receiving device can be automatically muted or reduced to a selectable level (col. 2, l. 46-64). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the combination of DeWeese et al. and Mimura et al. to include reducing the volume of a television audio signal upon receiving a audio message, such as that taught by August et al. in order to provide the automatic interaction of desirable activities (August et al. col. 2, l. 56-68).

Referring to claims **20** and **21**, the combination of DeWeese et al., Mimura et al., and August et al. teaches a set top box according to claims 19 and 30, respectively, wherein the message information comprises at least one of video information, text information, and a pre-formatted message (the examiner notes that chat sessions can have text, audio, video, or a combination, as well additional appended information)(DeWeese et al. p. 3, paragraph 55; p. 4, paragraph 64; & p. 14, paragraph 141).

NOTE: The USPTO considers the applicant's "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

Referring to claims **23** and **25**, the combination of DeWeese et al., Mimura et al., and August et al. teaches the set top box according to claims 30 and 19, respectively, further comprising a memory storing pre-made voice messages (the examiner notes that chat sessions can be stored and viewed at a later time)(DeWeese et al. p. 4, paragraph 64).

Referring to claim **24**, the combination of DeWeese et al., Mimura et al., and August et al. teaches the set top box according to claim 19, wherein the message information is retrieved from a memory device (DeWeese et al. p. 5, paragraph 69).

Referring to claim **26**, the combination of DeWeese et al., Mimura et al., and August et al. teaches the set top box according to claim 19, further comprising a message waiting indicator (the examiner notes that when a message is received it appears in region 206)(DeWeese et al. p. 8, paragraph 93 & Fig. 9).

Referring to claims **27** and **31**, the combination of DeWeese et al., Mimura et al., and August et al. teaches the set top box according to claims 19 and 30, respectively, further comprising another input adapted to receive information from a keyboard (DeWeese et al. p. 5, paragraph 67 & Fig. 1B).

Referring to claim **28**, the combination of DeWeese et al., Mimura et al., and August et al. teaches the set top box according to claim 19, wherein the first input also receives a video signal (DeWeese et al. p. 3, paragraph 56) and the set top box modifies the video signal to display a text message (DeWeese et al. p. 8, paragraph 93 & Fig. 9).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Van Handel whose telephone number is 571-272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVH


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER